

WHAT IS CLAIMED IS:

1. A flexible wiring film comprising a lead of an electric conductor, and an insulating film, wherein said lead has a hole in a portion exposed from said insulating film.

2. The flexible wiring film according to Claim 1, wherein said hole is formed in a portion wider than a tip of said lead.

10 3. The flexible wiring film according to Claim 1 or 2, wherein said hole is of a shape selected from a circle, an elongated circle, an oval, and an elongated oval.

15 4. An apparatus comprising a lead of a flexible wiring film, a device chip electrically connected to the lead, and a sealant for sealing a connection portion between said lead and said device chip, wherein said lead has a hole formed in a portion in contact with said sealant.

20 25 5. A semiconductor apparatus comprising a lead of a flexible wiring film, a semiconductor device chip electrically connected to the lead, and a protecting member for protecting a surface of the semiconductor device chip, which are sealed with a sealant in a

peripheral portion of said semiconductor device chip,  
wherein said lead has a hole formed in a portion in  
contact with the sealant.

5       6. The semiconductor apparatus according to Claim  
5, wherein at least a part of said hole is formed in a  
region where a portion of the lead is sandwiched  
between said semiconductor device chip and said  
protecting member.

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7. The apparatus according to Claim 4, wherein  
said hole is formed in a portion wider than a tip of  
said lead.

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8. The semiconductor apparatus according to Claim  
5, wherein at least one of a layer for preventing  
reflection of external light and a layer for preventing  
multiple reflection is formed between said lead and  
said protecting member.

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9. An image pickup system comprising:

a solid-state image pickup apparatus consisting of  
the semiconductor apparatus as set forth in either one  
of Claims 5 to 8;

25       an optical system for focusing light on said  
solid-state image pickup apparatus; and  
a signal processing circuit for processing an

output signal from said solid-state image pickup apparatus.

10. A flexible wiring film comprising a lead of  
5 an electric conductor, and an insulating film, wherein  
said lead has a hole adapted to be adhered to an  
object.

11. A flexible wiring film comprising a lead of  
10 an electric conductor, and an insulating film, wherein  
said lead has a hole for enhancing to adhere.